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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/681,382	03/27/2001	Robert Malanga	GES-0007	5316
23413	7590	07/02/2004	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			GARG, YOGESH C	
			ART UNIT	PAPER NUMBER
			3625	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/681,382

Applicant(s)

MALANGA ET AL.

Examiner

Yogesh C Garg

Art Unit

3625

NW

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 March 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 6, 16, and 26 are objected to because of the following informalities: Claim 6 recites its dependency on claim 2, which is incorrect because the term "said credit card payment documents" is a continuation from claim 5 and not from claim 2. It seems to be a typographical error and as such the limitation, "The method of claim 2", should be replaced by --The method of claim 5--. Claims 16 and 26 have similar deficiencies and are there also objected. Appropriate corrections are required. Claims 6, 16, and 26 will be further treated on merits as suggested.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 10, 11-17, 20, 21-27, and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Stevens et al. (US Patent 5,842, 577), hereinafter, referred to as Stevens.

Regarding claim 1, Stevens teaches a method for automatically processing remittance payment documents, the method comprising:

receiving a plurality of payment documents for processing (see at least col.1, lines 5-11, "*The present invention relates to a system and method for processing mail and, more specifically, to an apparatus and method for extracting, reordering, reorienting, imaging and sorting documents, and particularly remittance transactions in the form of an invoice and an accompanying check.* " . Note: receiving mail consisting of remittance transactions in the form of invoice and accompanying check corresponds to the claimed limitation)

imaging and recording the content of said plurality of payment documents to extract data contained thereon, said data used for remittance processing (see at least col.6, lines 8-24, "*.....the documents are conveyed to an imaging section 200 that magnetically and optically images the documents to acquire image data for each document. The image data is stored in a file for later use during remittance processing. In the imaging section 200, the documents are first magnetically imaged by a MICR character reader 220, which reads the MICR line on the checks. Next, an image acquisition module 230 which includes at least one line scan camera 231, scans the documents to obtain an optical image of each selected document. The apparatus then processes the images to extract information about each document, such as the OCR line that appears on invoices. The extracted information and the image of the document are used to create a document record for each document.* ");

attempting to match said extracted data with a particular known account and known account holder, processing a payment amount included within said extracted data, if said extracted data is matched with said known account and known account holder, and if said extracted data is not matched with said known

account and known account holder, then forwarding said extracted data to a learning process and storing said extracted data in a database prior to processing said payment amount included within said extracted data (see at least (see at least col.16, lines 7-67, col.17, line 54-col.18, line 64, and col.19, line 53-col.20, line 67. These segments, in Stevens, show that the extracted data from MICR reader and OCR readers for a payment document is verified for a particular customer's account number and invoice amount by the imaging computer. If the extracted data is not matched then the computer forwards this extracted data to the respective batch file [corresponds to a database as claimed], where it is stored. The corresponding document and the mismatched image data are then subjected to manual reading/checking/ correcting [ correspond to a learning process as claimed], before processing the payment. However, If the extracted data from MICR reader and OCR readers is verified and matched for a document for particular customer's account number and invoice amount then the payment document is kept in a "clean" batch bin for further processing.).

Regarding claims 2-3, Stevens discloses that in the method of claim 1 said plurality of payment documents are received within an envelope (see at least col2, lines 20-29, "*...documents contained within envelopes.....*", and further comprising imaging and storing information contained upon said envelope (see at least col17, lines 1-12, "*....The compressed image is combined with the data representing....along with data rom the system controller 95.....The data from the system controller 95 includes*

*information from the envelope from which the particular document was extracted, such as a change of address indication, the presence of a postnet barcode, and the presence of a mark indicating a customer response. “, col.7, line 47-col.8, line 29 ) .*

Regarding claim 4, The method of claim 3, wherein said envelope includes a unique payer identification identifier attached thereto (see at least col.2, lines 20-29, “....an invoice and an accompanying check contained within a remittance payment envelope.....”, and col.16, lines 10-13, “ ... The OCR line data is necessary....for an invoice includes information about the customer’s account.....”. Note: The invoice including the customer’s account number corresponds to the claimed limitation).

Regarding claim 5; Stevens discloses that I the method of claim 1, said payment documents comprise credit card payment documents (see at least col.1, lines 20-30, “....credit card companies routinely receive thousands of payment envelopes from their customers on daily basis..... “).

Regarding claim 6, Stevens discloses that the method of claim 5, wherein said credit card payment documents further comprise a remittance stub and a check (see at least col.1, lines 20-30, “....credit card companies routinely receive thousands of payment envelopes from their customers on daily basis....The contents of each envelope .....consist of ....single invoice stub and accompanying check.. “).

Regarding claims 7 and 10, Stevens discloses that in the method of claim 6, said extracted data further comprises: a bank code, said bank code included on said check and is read by a microcode reader, a remittance payment amount, said remittance payment amount included on said remittance stub (see at least col.2, lines 27-29, “*...Appropriate image data is acquired and stored such as the MICR line of a check and the OCR line of an invoice..*”. Note: The MICR line of a bank check includes the bank code and the OCR line of invoice, which corresponds to the remittance stub, includes a remittance payment amount, see col. 16, lines 7-26, “*...MICR character reader 220 if the document is check....*”) and a signature, said signature included on said check (see at least col.6, lines 8-24, which teaches scanning the checks and the scanned data will inherently include the signature on the check ).

Regarding storage medium claims 11-17 and 20, their limitations are closely parallel to the method claims 1-7 and 10 and are therefore analyzed and rejected on the basis of same rationale.

Regarding computer data code claims 21-27 and 30, their limitations are closely parallel to the method claims 1-7 and 10 and are therefore analyzed and rejected on the basis of same rationale.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-9, 18-19, and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens and further in view of Wayner et al. (US Patent 5,253,307), hereinafter, referred to as Wayner.

Regarding claims 8-9, Stevens discloses a method for automatically processing remittance payment document, which includes a check received from a payor, as analyzed above in claim 7. Stevens does not disclose that handwritten data on said check is read by optical character recognition equipment and is analyzed by handwriting analysis software. However, in an analogous field of endeavor, that is image analysis of typeface information, Wayner teaches that handwritten data on said check is read by optical character recognition equipment and is analyzed by handwriting analysis software is a prior art (see at least col.2, lines 15-34, " *Umeda et al.*, EP-A-288 266, describe techniques for discriminating between **handwritten** and machine-printed characters. As described at page 2 lines 7-15, similarity of machine-printed characters is determined from similarity of overall shape, while similarity of **handwritten** characters is determined on the basis of features such as horizontal, vertical, or slanted lines. For effective recognition, two optical character readers



*(OCRs) are provided for the respective recognition techniques. Errors result from processing handwritten characters with the OCR for machine-printed characters, but this could be avoided if it is known before recognition with OCRs whether the characters are machine-printed or handwritten. As shown and described in relation to FIG. 2, the discrimination is made by detecting that the occurrence ratio of the slanted stroke component to the total of horizontal, vertical, and slanted stroke components is above an experimentally determined level.".* Note:

This prior art explicitly discloses reading handwritten characters by OCR and in doing so errors are made but the same are detected by techniques, which correspond, to an analyzing software as claimed in the instant application). In view of Wayner, it would have been obvious to a person of an ordinary skill in the art at the time of the applicant's invention to modify Stevens to include the feature of reading handwritten data on said check by optical character recognition equipment and is analyzed by handwriting analysis software. Doing so would enable the system in Stevens to be able to read the handwritten figures, such as payment amount, any reference numbers, dates, etc automatically as being done for the invoice handwritten data and the use of handwriting analysis software would further help in detecting the errors made by OCR while reading the curved handwritten data on the check so that corrective action can be taken.

Regarding storage medium claims 18-19, their limitations are closely parallel to the method claims 8-9 and are therefore analyzed and rejected on the basis of same rationale.

Regarding computer code claims 28-29, their limitations are closely parallel to the method claims 8-9 and are therefore analyzed and rejected on the basis of same rationale.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(i) Schantz, Herbert F.; " Document Management"; Work Process Improvement Today; Boston; Dec: 1998; Vol.20; Iss.5; pg.16, 2 pgs; extracted on Internet from proquest database on 6/25/2004 discloses imaging and document processing.

(ii) EP 0571308A1 to Steven et al. discloses receiving payment documents and remittance processing (see at least abstract).

(iii) US Patents 5,926,392 to York et al., (see at least abstract), 6,112,902 to Hayduchok et al. (see at least abstract), 6,196,393 to Kruk et al. (see at least abstract), and 6,547,078 to Lile et al. (see at least abstract) teach receiving payment documents and remittance processing.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yogesh C Garg whose telephone number is 703-306-0252. The examiner can normally be reached on M-F(8:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vincent A Millin can be reached on 703-308-1065. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Yogesh C Garg  
Primary Examiner  
Art Unit 3625

YCG  
June 25, 2004